



Weekly Summary Report

USEPA Oversight, Sauget Area 2, Sauget, IL

WA No. 224-RXBF-05XX / Contract No. 68-W6-0025

Week Ending Friday, January 7, 2005

This report summarizes the Interim Remedial Action (IRA) work conducted by Solutia and its contractors from December 31, 2004 through January 7, 2005 at Site R, Sauget Area 2. Ongoing IRA fieldwork consists of slurry stabilization, barrier wall cap construction, and stormwater management.

Contractors Onsite

Inquip Associates Inc. (barrier wall construction contractor)
URS (primary consultant for Solutia)

Work Performed This Week

Stormwater management was the only activity conducted at the site during the reporting period due to significant rainfall events. Barrier wall cap construction, site grading, slurry stabilization, decontamination and demobilization of construction equipment are expected to continue as the primary site activities during the upcoming weeks.

Groundwater Migration Control System (GMCS)

The river elevation increased substantially during the week, rising from 384.3 feet above mean sea level (amsl) on January 3 to 399.8 feet amsl on January 10. Between January 3 and January 6, the river level sharply increased, cresting at approximately 409 feet amsl, and decreased thereafter. At approximately 8:00 AM on January 3, the extraction well pumps were turned off at the request of American Bottoms due the high influx of water to the plant following significant rainfall. Pumping resumed at approximately 8:00 AM on January 4. The extraction well pumps were off throughout the remainder of the reporting period, except the center extraction well, EW-2, which pumped groundwater on January 6 and 7 to accommodate the drainage of stormwater from the modutanks to the American Bottoms Regional Treatment Facility (ABRTF). At the end of the reporting period, the three extraction wells were not operating.

Eight barrier wall piezometers, with four inside and four outside the barrier wall alignment, monitored the groundwater elevations adjacent to the barrier wall alignment during the week. Table 1 shows the river and piezometer water elevations measured at 9:00 AM on January 10, 2005.

ROD Performance Metrics (Gradient Across the Barrier Wall)

On January 3, without the GMCS extraction wells pumping, the water levels at the inside piezometers P2E, P3E, and P4E increased to slightly greater than their corresponding piezometers located outside the barrier wall alignment, indicating an outward gradient toward the Mississippi River. Subsequently, the extraction wells resumed pumping groundwater on January 4. From January 4 onwards, all four piezometer pairs displayed an inward

groundwater gradient across the barrier wall, toward Site R. During this time period, the water elevations in the outside piezometers varied between zero and approximately 16 feet greater than the water elevation in their corresponding piezometer located inside the barrier wall.

FFS Performance Metrics (Gradient Between Inside Wall Piezometers and River)

When compared to the Mississippi River elevation, between January 3 and 4, piezometers P2E, P3E, and P4E, located inside the barrier wall, displayed an outward gradient, toward the Mississippi River. Subsequently, throughout the remainder of the reporting period all four piezometers located inside the barrier wall recorded water elevations lower than the river, indicating an inward gradient toward Site R.

Table 1
River and Piezometer Water Elevations – January 10, 2005 (9:00 AM)

	Elevation (ft above mean sea level)
River Level	399.78
Piezometer 1S – inside wall (northern-most pair)	391.20
Piezometer 1N – outside wall (northern-most pair)	396.39
Piezometer 2E – inside wall (north-central pair)	392.83
Piezometer 2W – outside wall (north-central pair)	398.28
Piezometer 3E – inside wall (south-central pair)	392.56
Piezometer 3W – outside wall (south-central pair)	397.34
Piezometer 4E – inside wall (southern-most pair)	392.54
Piezometer 4W – outside wall (southern-most pair)	396.05

Barrier Wall Cap Construction and Site Grading

No new cap construction or site grading occurred during the current reporting period. In the upcoming weeks, cap construction will continue northward from station 25+25 toward station 26+00. Site grading activities at the site will also resume.

Slurry

No slurry stabilization operations occurred during the reporting period. Slurry stabilization activities will be discontinued until a new earthwork subcontractor commences work at the site.

Stormwater

Significant rain during the early part of the week caused pooling of stormwater on site. Stormwater was collected from localized areas on site and pumped to the modutanks. As necessary, stormwater was flocculated and discharged to the American Bottoms Regional Treatment Facility (ABRTF).

Photos for the week ending January 7, 2005



East to west view of northern leg of barrier wall and site grading.
(January 6, 2005)



East to west view of northwest corner of Site R, GMCS control building, and site grading.
(January 6, 2005)